

EXECUTIVE SUMMARY

ACTION ITEM: **Authorization to approve a continuing award from the USDA Forest Service Southwestern Region (NAU).**

ISSUE: Pursuant to ABOR Policy 3-203, Northern Arizona University (NAU) requests Board approval of a continuing award to NAU's Ecological Restoration Institute from the USDA Forest Service Southwestern Region. The proposed amount is \$1,969,000, for a cumulative total to date of \$7,618,116.

BACKGROUND:

- NAU has received an offer of a continuing award from the USDA Forest Service Southwestern Region (Forest Service) to support the restoration of forest health in frequent fire forests. The proposed amount of the continuing award is \$1,969,000 for a cumulative total of \$7,618,116 through September 2010, and an anticipated award total of \$27,600,000 through 2020. There is no cost share/matching commitment.
- The goals of this program are to demonstrate and promote the use of adaptive ecosystem management to reduce the risk of forest fires, and to restore the health of fire-adapted forest and woodland ecosystems of the interior West.
- The NAU project director is Regents' Professor Wally Covington, Director of the Ecological Restoration Institute (ERI) (Vice President for Research).
- The current five-year project period is 23 June 2005 through 30 September 2010.

STRATEGIC IMPLICATIONS:

- The Ecological Restoration Institute supports the University's strategic goal of sustainability and stewardship of place.
- The ongoing project funded by the Forest Service supports and draws upon the University's strengths in restoration ecology and sustainable forestry.

RECOMMENDATION / CONCLUSION:

The Board of Regents authorizes NAU to finalize this agreement for the Ecological Restoration Institute.

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EXECUTIVE SUMMARY

ACTION ITEM: **Authorization to approve a continuing award from the National Science Foundation. (NAU)**

ISSUE: Pursuant to ABOR Policy 3-203, Northern Arizona University (NAU) requests Board approval of a continuing award to NAU's Center for Science Teaching and Learning from the National Science Foundation. The proposed amount is \$588,094, for a cumulative total to date of \$1,084,375 and an anticipated total of \$2,884,359.

BACKGROUND:

- NAU has received an offer of a continuing award from the National Science Foundation to fund project *Biotechnology Integration Opportunities for Teacher Education and Content (BIOTEC)*. The proposed amount of the continuing award is \$588,094 for a cumulative total of \$1,084,375 and an anticipated award total of \$2,884,359 federal funding. There is no cost share/matching commitment.
- The goals of this program are to enhance inquiry-based science teaching while expanding the interdisciplinary preparation of graduate students in biotechnology. The innovative components of this project are the use of biotechnology as a means to add relevancy and interest in STEM concepts in K-12 classrooms, and the use of existing cyber-infrastructure to reach teachers and students in remote areas (specifically Navajo reservation schools).
- The NAU project director is Catherine Ueckert, Associate Professor of Biology (College of Engineering, Forestry & Natural Sciences).
- The project period is 1 March, 2008 through 28 February, 2013.

STRATEGIC IMPLICATIONS:

- The BIOTEC project supports the University's strategic goals to be a learner-centered university, and of serving Native American tribes and communities.
- The ongoing project funded by NSF supports and draws upon the University's strengths in education and training of K-12 educators.

RECOMMENDATION / CONCLUSION:

The Board of Regents authorizes NAU to finalize this agreement for the Center for Science Teaching and Learning.

EXECUTIVE SUMMARY

ACTION ITEM: Authorization to approve a new award from Science Foundation Arizona. (NAU)

ISSUE: Pursuant to ABOR Policy 3-203, Northern Arizona University (NAU) requests Board approval of a new award from Science Foundation Arizona to NAU's Sustainable Energy Solutions Group. The proposed first year award amount is \$2,290,683, for a cumulative proposed four-year award of \$8,000,000.

BACKGROUND:

- NAU has received an award from Science Foundation Arizona (SFAz) to fund the creation of a Wind Energy Strategic Research Group (SRG). The proposed first year award amount is \$2,290,683 for a cumulative four-year award of \$8,000,000 from SFAz. The SFAz award is premised on a cost share commitment of \$13,500,000 from Independent Power Projects (IPP) (Houston, TX).
- The goal of the SFAz Strategic Research Groups (SRGs) is to facilitate the collaboration of outstanding researchers at Arizona's Research Performing Institutions (RPIs) with industry in order to cultivate strong partnerships that will inform and enhance the State's existing research programs, help attract and retain new industry research to Arizona, and create research and economic advantages for the partners and for Arizona.
- The Wind Energy SRG will focus on wind resource characterization and computational modeling of winds in complex terrain. Outputs of the SRG will contribute to the scientific understanding of wind flows in complex terrain, leverage additional research funding, contribute to commercial wind energy development in Arizona, and establish a commercial entity with expertise in optimized micro-siting of wind turbines within wind power plants.
- The NAU project director is Dr. Tom Acker, Associate Professor of Mechanical Engineering and Director of the Sustainable Energy Solutions Group (College of Engineering, Forestry & Natural Sciences).
- Researchers from ASU's Mechanical and Aerospace Engineering Department and the Center for Environmental Fluid Dynamics also will participate in the SRG.
- The project period is 1 January 2009 through 31 December 2013.

STRATEGIC IMPLICATIONS:

- The Wind Energy SRG supports the University's strategic goal of sustainability and stewardship of place and vision of advancing technological solutions for clean energy and producing a new generation of accomplished educators, scientists, and sustainable systems engineering professionals.
- The project supports and draws upon the University's strengths in environmental technologies and sustainability. The successful development of the renewable energy resources will bring millions of dollars of tax revenue, jobs and other benefits to the state.

RECOMMENDATION / CONCLUSION:

The Board of Regents authorizes NAU to finalize this agreement for the Sustainable Energy Solutions Group.